

Stat 602 Homework 2

Kiegan Rice and Nate Garton

Due 3/4/2019

Problem 1

Problem 4.3

Problem 4.4

Problem 5.1

Note: Most of this is on 602 HW2 from 2015 (problem 6)

Problem 2

Part a

Part b

Problem 3

Note: This is Stat 602 HW3 from 2015 (problem 21)

Problem 4

Note: This is Stat 602 HW3 from 2015 (problem 22)

Note: There is some crossover with 502X HW2 Q15(a) here.

Part a

Part b

Part c

Problem 5

Note: This is Stat 602 HW3 from 2015 (problem 23)

Part a

Part b

Problem 6

Note: This is 502X HW 2 Q16(a) (**Kiegan will do this problem**)

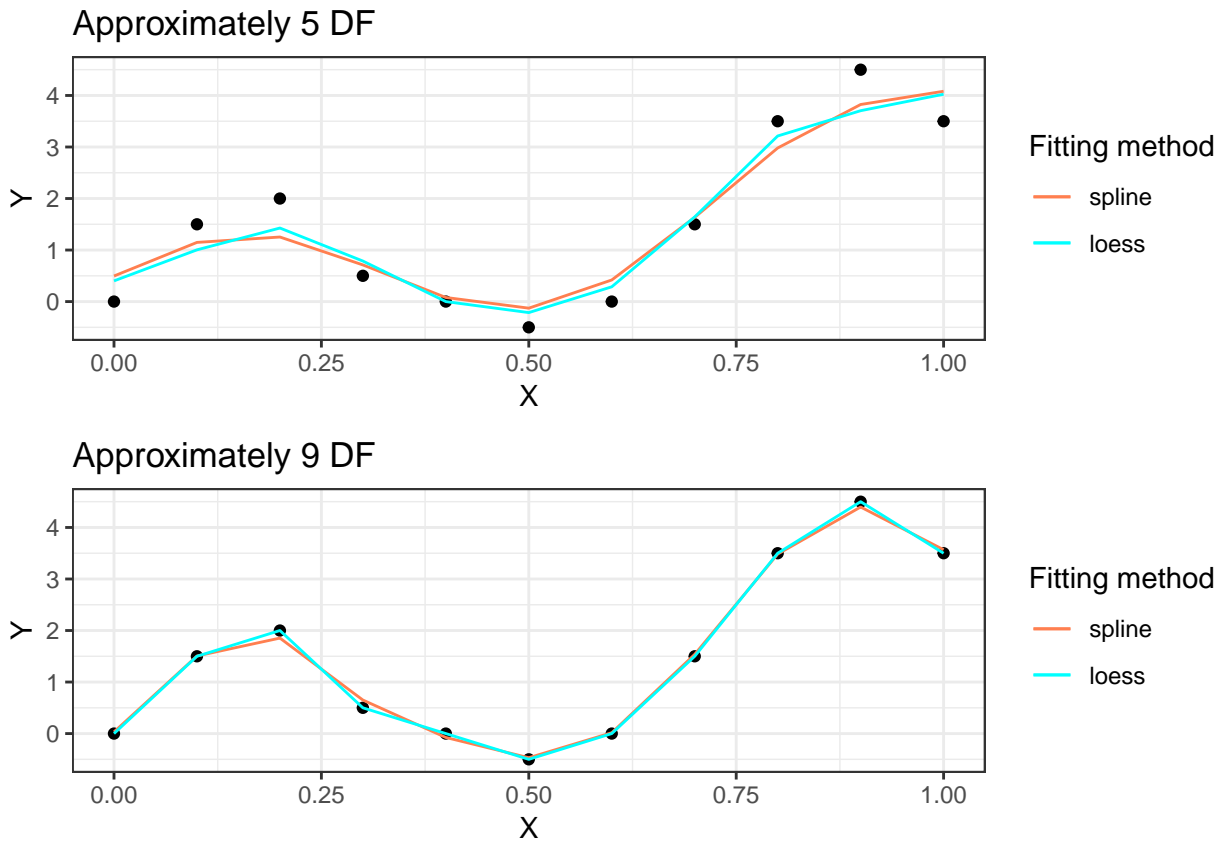


Figure 1: Plots for effective degrees of freedom 5 (top) and 9 (bottom) for Problem 6(a).

Part a

The plots for this problem can be seen in Figure 1.

Problem 7

kNN

elastic net

PCR

PLS

MARS (in earth)

Problem 8

Part a

Part b

Part c

Part d